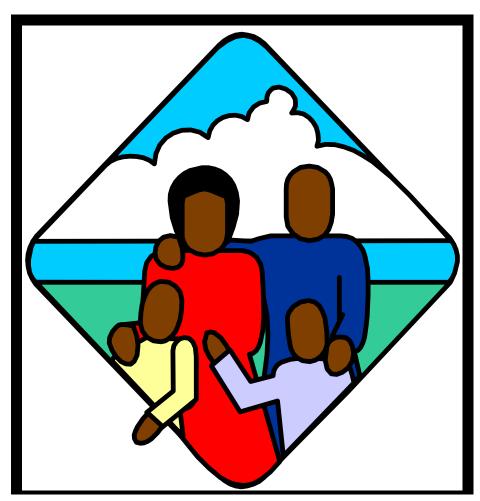


Incorporating Injury Prevention into Health Programs Serving Women, Children, Adolescents, and Their Families



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Overview and Background

Injury is one of the most serious social, economic, and medical problems of our time. More children and adolescents die from injuries than all other causes of death combined. Many more are disabled permanently in childhood. This can lead to a life of struggle to cope with the high costs of maintaining health.

Injuries affect us all, from the families left behind to the general public who pay more each year for an overburdened emergency medical trauma system. In addition, medical,

educational, and social support systems are struggling to meet the needs of disabled children and their families.

The tragedy is that most childhood injuries can be prevented through the use of existing technology, environmental changes, and education.

This document is based on the experiences of local Maternal, Child, and Adolescent Health (MCAH) Programs that used their expertise in public health and worked to incorporate injury prevention into their on-going services.

The steps which follow describe a process for identifying and prioritizing injury problems in a particular population, and then developing and implementing interventions that build on the structure and operations of existing client services.

The appendices include examples of interventions designed to address specific injuries within a specific health program. A list of resources is included on the inside of the back cover.

It is our hope that the steps that follow will assist you in your efforts to ensure the health and well-being of children and adolescents by preventing injury deaths and disabilities.

Overview of the Process



Step 1: Identify injuries among the client population.

Step 2: Prioritize injuries and decide which injuries are the most important to prevent.

Step 3: Examine client flow through the program for potential intervention points.

Step 4: Look at Best Practices and determine possible interventions.

Step 5: Develop protocols for conducting the intervention.

Step 6: Pilot-test the intervention protocol.

Step 7: Train staff.

Step 8: Implement the intervention.

Step 9: Evaluate and revise the intervention as necessary.

Step 10: Share lessons learned.





STEP 1

Identify Injuries Among the Client Population

Program personnel can use existing data sources to identify injuries among clients of their specific MCAH program, including data from death registries, hospital discharges, and clinic records.

Example: Prenatal Programs

The client population is pregnant women.

Injuries: (1) Motor vehicle occupant injuries.

(2) Violent injuries due to partner assault.

STEP 2

Prioritize Injuries and Decide Which Injuries are the Most Important to Prevent

The following criteria may assist you to determine injury prevention priorities:

- 1. Does the injury result in severe disability or death?
- 2. Is the injury a problem that is commonly seen among your client population?
- 3. Does the injury result in high medical and/or societal costs?
- 4. Is there an effective prevention strategy?
- 5. Is there community/agency/client desire to prevent the injury?
- 6. Would your clients be able to implement the recommended safety actions?

STEP 3

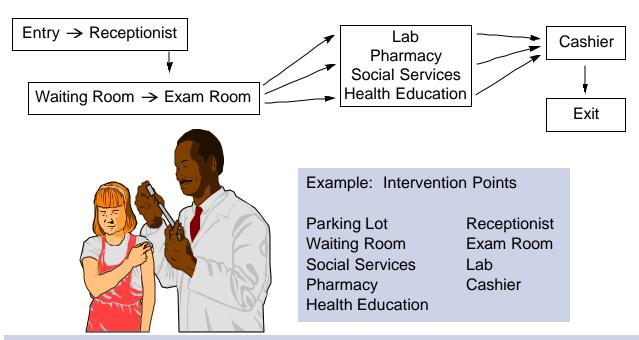
Examine Client Flow Through the Program for Potential Intervention Points

Example: Well Child Clinic

Client Flow: The parent periodically brings the infant or child to the health care facility to be examined for developmental and health problems and to receive immunizations.

- Parent(s) and child(ren) wait in waiting room until called.
- A nurse conducts a preliminary assessment of the child and takes health and developmental history.
- The physician or nurse practitioner then examines the child, reviews medical history, and counsels parent.
- A nurse returns to give immunizations, to provide forms for any lab work needed, and to complete plans for referrals and next visit.
- Parent(s) and child stop by pharmacy to pick up any medication needed, pay for visit, and leave the health care facility.

Client Flow



STEP 4

Look at Best Practices and Determine Intervention

Determine Practices Proven Successful At Preventing Priority Injuries

- 1. Review the literature for "Best Practices."
- 2. Talk with experts to obtain their recommendations regarding effective interventions in a program setting.
- 3. Talk to others working in similar settings to explore what works and how to overcome potential barriers.

Select Intervention

- 1. Look at the fit between Best Practices and potential intervention points. Is there a way to incorporate any Best Practices into the structure of a program?
- 2. Adapt Best Practices selected to reflect the cultural diversity of clients, the setting in which the intervention will be conducted, and the expertise of staff that will be carrying out the intervention.

Example: Preventing Motor Vehicle Injuries in a Well Child Clinic using the Client Flow illustrated in Step 3.

Sample of Intervention Points:

- 1. Parking Lot: Sign at exit reminding folks to "Buckle Up"
- 2. **Receptionist**: Ask if the child traveled to the clinic in a child safety seat. If not, refer to health educator for assistance with obtaining a child safety seat and instructions on proper installation and use.
- 3. **Waiting Room**: Display a toddler-sized doll properly strapped into a forward facing child safety seat and pictorial information demonstrating proper use of infant, child and booster safety seats.
- 4. **Exam Room**: Practitioner reinforces need for use of a child safety seat and asks about common misuses appropriate to the child's age. Referral made to health educator if problems are identified.

STEP 5 Develop Protocol for Conducting the Intervention

In conjunction with program staff, develop a written protocol that describes:

- 1. Who is responsible for doing specific parts of the intervention;
- 2. Activity at each point during the flow of the program;
- 3. How to obtain any items needed, i.e., educational material or safety devices; and
- 4. How to note what is done in a patient's medical record so the intervention being implemented can be tracked and adjustments made as needed.

When possible, it is useful to observe current client safety practices as a baseline before beginning the intervention. This information can guide development of the written protocol as well as provide baseline data for later evaluation of the intervention.

(Note: Visit http://www.cippp.org for links to sites with prevention protocols, educational materials, and resource information for pediatric injury prevention counseling at well child visits.)

Example: Six-Week Postpartum Visit

"... nurse asks parent if infant was brought to the clinic in an infant safety seat, if the safety seat faced backward, and if the safety seat was installed in the rear seat of the vehicle. If yes, response is noted in patient's medical record and reinforced with educational material containing tips on how to correctly install an infant safety seat in a vehicle. If no, and the infant was brought by vehicle, parent is referred to health educator to obtain loaner safety seat and receive instruction on correct use. If infant was brought by bus and usually travels that way, information is noted in patient's medical record . . ."



STEP 6 Pilot Test the Intervention Protocol

Train staff on the injury problem, demonstrate safety devices, and discuss key injury prevention messages.

- Introduce intervention protocols, tracking system, and intervention materials.
- Make any revisions needed before pilot test to reflect concerns of staff regarding what is feasible within program operations and any language or cultural barriers missed during the initial development of the intervention.
- Implement revised protocols for a limited period of time.
- Gather feedback from staff and patients and revise protocols, tracking system, and program materials prior to full implementation based on feedback received.



STEP 7 Train Staff

Introduce all staff to the nature and extent of selected priority injuries, demonstrate safety devices, and discuss key injury prevention messages.

- Review the intervention protocol and system of tracking the intervention.
- Introduce any materials and resources the staff will need.
- Review how to obtain and store the materials and resources.
- Share lessons learned and any tips for implementation gathered during the pilot test of the intervention.

STEP 8 Implement the Intervention

Conduct intervention using the intervention protocol. Be sure that resources and materials needed to conduct the program are available and that the intervention tracking system is being used to document intervention efforts. Provide support as needed.



Step 9 Evaluate and Revise the Intervention as Necessary

Evaluate the intervention by reviewing the intervention tracking system, obtaining feedback from staff and patients, and looking at any data sources that would pick up the impact of the intervention. Meet with staff to share results and revise the intervention as needed. Periodically update protocols and materials to reflect injury problems seen among the client population and the latest technology and prevention strategies available. Develop any new materials or resources needed and train staff on how to use the new protocols and/or resources. Train new staff as they are hired on the intervention protocols and materials.

STEP 10 Share Lessons Learned

Document results of the intervention and share lessons learned with other programs so that they can build upon successes, avoid any barriers encountered, and increase ability to prevent injuries among client population. Talk with and learn from other programs conducting similar interventions.



Appendices

- Chart—Health Settings Where Injury Prevention can be Addressed
- ***** Examples:
 - A. Perinatal Program—Motor Vehicle Occupant Injuries
 - B. Perinatal Program—Family Violence
 - C. Well Child Clinic
 - D. Home Visit—Unintentional Injuries
 - E. Home Visit—Child Abuse and Family Violence
 - F. School-based Health Clinic
- Resources
- Key Contacts

Health Settings Where Injury Prevention Can Be Addressed

TOPIC	HEALTH SETTING				
	Prenatal Care Program	WIC Parenting Class	Well Child Clinic	Home Visits (Ages 0–3)	Adolescent Health Clinic
Bicycle Safety			•		•
Child Abuse	•	•	•	•	•
Child Safety Seats	•	•	•	•	
Choking and Suffocation	•	•	•	•	
Drowning	•	•	•	•	•
Falls		•	•	•	
Farm Injuries		•	•	•	
Fire and Scald Injuries		•	•	•	•
Firearms	•	•	•	•	•
Graduated Licensing					•
Home Childproofing	•	•	•	•	
Motorcycle Helmets					•
Occupational Injuries					•
Parenting Skills	•	•	•	•	
Pedestrian Safety			•		•
Playground Safety		•	•		
Poisoning, Unintentional	•	•	•	•	
Seat Belts	•	•	•		•
Sports Safety			•		•
Suicide Prevention					•
Violence Prevention	•	•	•	•	•

Adapted from: Children's Safety Network, Education Development Center, Inc., 1994. *Including Injury and Violence in FY96 Title V Grant Applications: Suggestions to State MCH Agencies.*

Example A Perinatal Program

Client Population: Pregnant women and newborn infants

Injury Priority: Motor vehicle occupant injuries

Program Operation/Flow: Pregnant women are seen periodically throughout their pregnancy at the health care facility. The woman (and partner) waits in the waiting room until called. The nurse takes blood pressure, collects urine sample, and asks about symptoms and concerns. The physician or nurse practitioner examines the woman, reviews medical history, and provides counseling as needed. After being examined, the woman stops by the pharmacy to pick up any medications or vitamins, pays for visit, and leaves health care facility. Six weeks after delivery, the woman returns to health care facility with her infant to be examined and discharged from the program.

- 1. Display an infant sized doll properly strapped into an infant safety seat in the waiting room.
- 2. At 16-week visit: Pregnant woman is counseled and instructed on how to wear a safety belt when she is pregnant. Pregnant woman is advised to obtain an infant safety seat; given an educational handout with tips on how to correctly install an infant safety seat in a vehicle; and referred to a loaner or voucher program if available and appropriate.
- 3. At 36-week visit: Pregnant woman is asked if she has an infant safety seat. If not, she is referred to a loaner or voucher program if available and appropriate.
- 4. At six-week post-partum visit: The new mom is asked if she is using an infant safety seat for her infant and given educational handout with tips on how to correctly install an infant safety seat in a vehicle. Woman is referred to a loaner or discount program if she does not have a safety seat. Dates and times of safety seat installation checks are given if available locally.

Example B Perinatal Program

Client Population: Pregnant women and newborn infants

Injury Priority: Family violence

Program Operation/Flow: Pregnant women are seen periodically throughout their pregnancy at the health care facility. The woman (and partner) wait(s) in the waiting room until they are called. The nurse takes blood pressure, collects urine sample, asks about symptoms and concerns. The physician or nurse practitioner examines the woman, reviews medical history, and provides counseling as needed. After being examined, the woman stops by the pharmacy to pick up any medications or vitamins, pays for visit, and leaves health care facility. Six weeks after delivery the woman returns to health care facility with her infant to be examined and discharged from the program.

- 1. Display information on intimate partner violence and safety planning in the women's rest room and patient waiting area.
- 2. Practitioner assesses woman for intimate partner violence when partner is not present. Findings and response are noted in patient record.
- 3. Counseling and referral are given if intimate partner violence is identified.
- 4. Follow-up is made with patient regarding intimate partner violence during subsequent prenatal visits.
- 5. Police reports are filed, as needed, following reporting requirements for family violence.
- 6. Links are established with clinic and community-based organizations for referral and support services.

Example C Well Child Clinic

Client Population: Children from 0–12 years old

Injury Priority: Motor vehicle injuries, falls, burns, firearms, choking, drowning, and child abuse.

Program Operation/Flow: Parent periodically brings infant or child to the health care facility to be examined and checked for developmental and health problems and to receive immunizations. Parent and child(ren) wait in waiting room. Nurse conducts preliminary assessment of child and takes health and developmental history. Physician or nurse practitioner then examines the child, reviews medical history and counsels parent. Nurse returns to give immunizations, provide forms for any lab work needed, and to complete plans for referrals and next visit. Parent and child stop by pharmacy to pick up any medication needed, pay for visit, and leave the health care facility.

- 1. Display a toddler-sized doll properly strapped into a child safety seat in waiting room.
- 2. Nurse asks about injuries including motor vehicle occupant injuries, falls, burns, choking, and drowning when taking patient history.
- 3. Physician or nurse practitioner reviews health history and examines child. Physician or nurse practitioner counsels parent on injury risks for child's developmental status and age, asks about the child's access to dangerous consumer products including swimming pools and firearms, and recommends prevention strategies and use of safety devices.
- 4. Nurse gives educational material that reinforces counseling provided and a schedule of safety seat checks if service is available locally. Discount coupon is given to parent if a child safety seat is needed.
- 5. If child abuse is identified or suspected, counseling and referral are given. A child abuse report is filed.
- 6. At the pharmacy, recommended safety devices are available, including smoke detectors and syrup of ipecac. Medications are dispensed with child safety caps, and stickers with the Poison Control Center toll-free phone number are provided.

Example D Home Visits

Client Population: Children from 0–3 years old

Injury Priority: Unintentional injuries including: falls, burns, choking, poisoning, drowning

Program Operation/Flow: Public health nurse periodically visits family to assess child(ren) for health and developmental problems and provide health education. Public health nurse examines child, assesses the home environment and asks about the health and developmental status of the child. Public health nurse provides appropriate counseling and referral.

- 1. Public health nurse asks about injuries, including falls, burns, choking, poisoning, and drowning, when taking patient history.
- 2. Public health nurse visually surveys the home and notes any safety hazards.
- 3. Public health nurse counsels caregiver on injury risks for child's developmental status, age, and injury history, and suggests specific prevention strategies and safety devices given his/her assessment of the home environment.
- 4. Public health nurse and parent examine safety hazards noted by the public health nurse, discuss prevention strategies and discuss progress towards incorporating any safety measures discussed at any previous visits.
- 5. As appropriate, referrals are made for smoke detectors, safety seats, cabinet/door childproof latches, stair and/or window guards, pool fencing, removal of guns from home/safe storage devices, syrup of ipecac, and abatement of peeling lead paint.
- 6. Public health nurse gives educational materials to caregiver reinforcing the counseling and referrals provided.
- 7. Public health nurse notes findings in patient record.

Example E Home Visits

Client Population: Children from 0-3 years old

Injury Priority: Child abuse, neglect, and family violence

Program Operation/Flow: Public health nurse (PHN) periodically visits family to assess child for health and developmental problems and provide health education. Public health nurse examines child, assesses the home environment and asks about the health and developmental status of the child. Public health nurse provides appropriate counseling and referral.

- 1. PHN reviews reports on siblings and caregivers for history of child abuse, relationship violence or substance abuse prior to conducting home visit.
- 2. When taking patient history, PHN observes child-caregiver interaction and asks about injuries, child's behavior, methods used to comfort child, and discipline techniques. PHN also inquires about how the caregiver copes with stress and what sources of support are available to the parent.
- 3. If caregiver is alone, PHN asks how partner interacts with the child, including typical discipline. Caregiver is also asked if she has been verbally or physically threatened or is afraid of her partner or other member of the household. If the response indicates abuse of the child or the caregiver, appropriate counseling and referrals are given. A report should also be filed with the appropriate agency.
- 4. If caregiver is not alone, PHN tries to schedule private time in the future to discuss how partner interacts with the child and caregiver.
- 5. PHN examines child looking at overall health and development. Unusual patterns of injury or failure to thrive should be noted.
- 6. PHN discusses child development, typical behaviors likely to occur given the child's developmental status, appropriate disciplinary techniques, and parent coping strategies. If firearms are present in the house, removal of guns from the home and safe storage options are discussed.
- 7. PHN gives educational materials to caregiver reinforcing counseling and referrals provided.
- 8. PHN notes findings in patient record and files child abuse or domestic violence reports as appropriate.

Example F School Health Centers

Client Population: Adolescents aged 12–18 years old

Injury Priority: Violence including fighting, verbal abuse, dating violence, homicide, and suicide

Program Operation/Flow: Student comes to clinic with a pass from teacher to see medical provider regarding physical exam, reproductive health, or general medical concerns. Student signs in. Health worker pulls chart, takes student to exam room, and gives student a psychosocial form to fill out while waiting. Medical provider meets with and examines student and treats student as necessary. Medical provider reviews psychosocial assessment form and counsels and refers student as appropriate. Student returns to class and medical provider completes paperwork and charting.

- 1. Posters with violence prevention messages are displayed on walls of the bathroom, waiting and exam rooms with information about conflict mediation and peer counseling available on campus.
- 2. Medical provider asks, as part of patient history, if someone is hurting the student; if he/she has any desire or has attempted to hurt themselves or others; how he/she deals with conflict; current substance abuse; and access to weapons. If the student has a current intent to harm him or herself or someone else, arrangements for further evaluation and safe placement are needed immediately.
- 3. Medical provider examines and treats student regarding original reason for visit. If this is an emergency visit, appropriate calls are made for medical support or additional treatment.
- 4. Medical provider reviews student's psychosocial assessment form, discusses issues identified on form and during patient history, and refers student to other services/programs needed.
- 5. Medical provider gives educational materials to student reinforcing counseling. Referrals are made and follow-up visits scheduled, if needed. Student returns to class.
- 6. Medical provider notes findings in patient record, consults with school counselor or social worker regarding referrals.

Resources

Publications:

California Department of Health Services, Maternal and Child Health Branch, *California Primary Care and Family Health Division Injury Prevention Plan*. Sacramento, CA. 1996.

Center for Injury Prevention Policy and Practice, *Integrating Injury Prevention into Community Clinics:* A Systematic Approach. 2001.

Christoffel T. and Gallagher SS. *Injury Prevention and Public Health—Practical Knowledge, Skills, and Strategies*. Gaithersberg, MD: ASPEN Publishers, Feb 1999.

Websites:

www.mch.dhs.ca.gov/programs/chipp/chipp.htm—Childhood Injury Prevention Program, Maternal and Child Health Branch, California Department of Health Services

www.cippp.org—Center for Injury Prevention Policy and Practice

www.dhs.ca.gov/epic—Epidemiology and Prevention for Injury Control (EPIC) Branch, California Department of Health Services

Key Contacts

Center for Injury Prevention Policy and Practice

Graduate School of Public Health, San Diego State University

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San Diego, CA 92120

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Maternal and Child Health Branch

California Department of Health Services

714 P Street, Room 750

Sacramento, CA 95814 Phone: (916) 651-6852

Children's Safety Network National Injury and Violence Prevention Resource Center

Education Development Center, Inc.

55 Chapel Street

Newton, MA 02458

Phone: (617) 969-7100, ext. 2207

Education Development Center, Inc.

1250 24th Street, NW

Washington DC 20037

Phone: (202) 466-0540

Children's Safety Network Injury Data Technical Assistance Center

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Children's Safety Network National Children's Center for Rural & Agricultural Safety

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Children's Safety Network Safety Economics and Insurance Center

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